should select a substitute channel from G(k_scan−8) to G(k_scan+7) excluding all forbidden channels. As k_est progresses with time, the content of train A changes.

[0059] As a further example, when the hop sequence consists of 8 channels, the two trains each consist of 4 channels. When the clock value (modulo-8) of the scanner device **302** is k_est, train A will be G(k_scan −2), G(k_scan −1), G(k_scan), G(k_scan +1), (where G(k_scan)=G(k_scan modulo 8)). Assume that channels G(2) and G(3) are forbidden. If k_scan=34, G(2), the selected channel is forbidden. The substitute channel is selected pseudo-randomly from one of the following channels: G(0), G(1), and G(3). Since G(3) is also forbidden, only G(0) and G(1) can be selected as a substitute channel. When no page message is received, another scanning channel is selected at the next scan instance, k_scan=35, so G(3) is initially chosen. The selected channel G(3) is determined to be forbidden. Because G(2) is also forbidden, the A train contains G(1) and G(4) as allowable channels that can be chosen as substitute channels.

[0060] In the drawings and specification, there have been disclosed typical embodiments of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being set forth in the following claims.

That which is claimed:

1. A method for establishing a connection between a scanner device and a paging device over a sequence of hop channels, the method comprising the steps of:

repeatedly activating the scanner device;

selecting a hop channel from the sequence of hop channels as a function of a present phase when the scanner device is activated;

determining whether the selected hop channel is a forbidden hop channel; and

selecting a substitute hop channel from the sequence of hop channels as the selected hop channel if the selected hop channel is a forbidden hop channel; and

monitoring the selected hop channel for receipt of a paging message during the present phase.

2. The method of claim 1, wherein determining whether the selected hop channel is a forbidden hop channel further comprises the steps of:

monitoring interference on the selected hop channel; and

deciding that the selected hop channel is a forbidden hop channel when the monitored interference exceeds a threshold value.

3. The method of claim 2, further comprising adding the selected hop channel to a set of forbidden hop channels if the selected hop channel is determined to be a forbidden hop channel.

4. The method of claim 3, further comprising adding a channel, that is adjacent to the selected hop channel, to the set of forbidden hop channels if the selected hop channel is determined to be a forbidden hop channel.

5. The method of claim 3, further comprising removing a hop channel from the set of forbidden hop channels when the selected hop channel is determined to not be a forbidden hop channel.

6. The method of claim 5, further comprising removing a hop channel from the set of forbidden hop channels when the interference on the hop channel is less than a threshold value.

7. The method of claim 1, wherein determining whether the selected hop channel is a forbidden hop channel further comprises the steps of:

receiving a paging message on a selected hop channel;

comparing the closeness of a value represented by the paging message and a value stored within the scanner device; and

deciding that the selected hop channel is a forbidden hop channel when the closeness of the comparison is outside a threshold range.

8. The method of claim 1, wherein selecting a substitute hop channel further comprises the step of repetitively selecting a different substitute hop channel and determining whether the selected substitute hop channel is forbidden until the selected substitute hop channel is determined to be not forbidden.

9. The method of claim 1, wherein determining whether the selected hop channel is a forbidden hop channel comprises comparing the selected hop channel to a set of forbidden hop channels.

10. The method of claim 9, wherein selecting a substitute hop channel comprises selecting a hop channel from the sequence of hop channels that is not within the set of forbidden hop channels.

11. The method of claim 9, wherein at least one of the set of forbidden hop channels is associated with received interference from a communication device other than the paging device.

12. The method of claim 9, wherein at least one of the set of forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

13. The method of claim 1, wherein the substitute hop channel is selected using a time-varying parameter.

14. The method of claim 13, wherein selecting a substitute hop channel comprises forming an index value from the time-varying parameter and selecting the substitute hop channel from the sequence of hop channels using the index value.

15. The method of claim 14, wherein the index value is formed from the expression:

index value=(the time-varying parameter modulo N)+BASE_VALUE,

where N is the number of hop channels in the sequence of hop channels and BASE_VALUE represents an index value of a first hop channel in the sequence of hop channels.

16. The method of claim 14, wherein selecting a substitute hop channel comprises:

designating one of the hop channels in the sequence of hop channels as a first hop channel; and